

SYSTEM AND METHOD FOR DETERMINING NETWORK DISCRETE
UTILIZATION

Abstract of the Disclosure

5 To evaluate a communications network, a plurality of network evaluation signals, or probative test packets, are selectively sent and received through the network.

10 Responsive to these evaluation signals, network evaluation parameters are determined and stored. Queuing theory analysis, responsive to these parameters, determines the response time and throughput characteristics, including discrete capacity, utilization and performance, of the network. Calculation of the value of the network's discrete utilization involves the measurement of the network's

15 average delay waiting for service, measurement of the network's standard deviation of delay waiting for service, calculation of discrete utilization from the ratio of these observed values, and then refinement of that calculation by proportionate factoring in instances of dropped samples as

20 cases of one hundred percent utilization to arrive at a final figure for percent of network discrete utilization.